JPRS 74592 16 November 1979

USSR Report

AGRICULTURE

No. 1207



JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service (NTIS), Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in <u>Government Reports Announcements</u> issued semimonthly by the NTIS, and are listed in the <u>Monthly Catalog of U.S. Government Publications</u> issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Indexes to this report (by keyword, author, personal names, title and series) are available through Bell & Howell, Old Mansfield Road, Wooster, Ohio, 44691.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

Soviet books and journal articles displaying a copyright notice are reproduced and sold by NTIS with permission of the copyright agency of the Soviet Union. Permission for further reproduction must be obtained from copyright owner.

30277 (g)		
REPORT DOCUMENTATION 1 REPORT NO JPRS 74592	2 3 Recip-	ent's Accession No
4 Title and Subtile	9 6000	Date
USSR REPORT: AGRICULTURE, No. 1207	16	November 1979
7. Authoris	1.5-4-	
	8 Parton	ming Organization Rept No.
5 Performing Digerization Name and Address	16 Proce	ct/Tess/Work Unit No
Total Publications Research Service		
Wilmston, Virginia 22201	11 Cambr	ectici er GrantiGi No
virginia 22201		
	(G)	
12 Sportsoung Organization Name and Address	13. Type	of Report & Period Covered
Se above		
	14	
15 Supplementary Notes	•	
16. Abstract (Limit 700 words)		* ***
and republic levels, plans and plan fulfitechnological achievements and shortcomin administration, and management. Informat when it is indicative of trends or innova	gs, and agricultural in ion at lower levels is	Westmanke
17 Decument Analysis is Descriptors		
USSR Agriculture		
b Identifiers/Open-Ended Terms		
cosati Field/Group 2D, 2B		
	100 000 000 000	Ten e
M. Aventability Statement Unlimited Availability	19. Security Class (This Report)	21. No. of Pages 2.6
Sold by NTIS Springfield, Virginia 22161	UNCLASSIFIED 20. Security Class (This Page)	22. Proce
auringileid. Virginia 77161		

USSR REPORT

AGRICULTURE

No. 1207

CONTENTS	PAGE
'PRAVDA' Carries November Weather Forecast for USSR (PRAVDA, 31 Oct 79)	1
Faster Pace of Replowing of Potato Fields Urged (Editorial; SEL'SKAYA GAZETA, 17 Oct 79)	3
Cartoon on Slow Replowing of Potato Fields (A. Garmazy; SEL'SKAYA GAZETA, 18 Oct 79)	5
Experience and Problems in Interfarm Cooperation (N. Goryachko; SEL'SKAYA GAZETA, 5 Sep 79)	6
Joachim Kunz Article on Meadow and Pasture Development (Joachim Kunz; FREUNDSCHAFT, 24 Jul 79)	10
Zhambakin Interview on Meadow and Pasture Development (Zh. Zhambakin Interview; FREUNDSCHAFT, L Jul 79)	13
Protecting Winter Crops From Ground Beetles (I. Babchuk, I. Plastun; SEL'S'KI VISTI, 4 Oct 79)	15
Use of Insects Against Agricultural Pests Described (Elmira Nesirova; SOVET KENDI, 25 Sep 79)	17
Johann Kraemer Article on Specialization in Swine Raising (Johann Kraemer; FREUNDSCHAFT, 4 Jul 79)	19
Livestock Raising in Complexes (M. Zigarev, G. Trifonova; FREUNDSCHAFT, 18 Sep 79)	21
Briefs Khabarovsk Kray Potatoes	25

'PRAVDA' CARRIES NOVEMBER WEATHER FORECAST FOR USSR

LD051409 Moscow PRAVDA in Russian 31 Oct 79 p 6 LD

| Weather forecast under the rubric "November's Weather": "Threats of Gray Winter..." -- first two grafs are PRAVDA introduction]

[Text] October gave inhabitants of the European part of the country many warm and sunny days. But at the end of the month it became abruptly colder and snow fell. So has winter arrived, or are returns to relatively mild weather still possible?

In answer to this question a PRAVDA correspondent was told about November's weather at the USSR Hydrometeorological Center.

Winter has arrived in northern areas of the European part of the country. In Murmanskaya Oblast, the Karelskaya ASSR, Arkhangelskaya Oblast and the Komi ASSR during November the night frosts will reach minus 23-minus 28 degrees and daytime frosts minus 12-minus 17 degrees. However, at times the frosts will abate, and there is a possibility of thaws on some days.

In the Volgo-Vyatka region and on the middle Volga the first 10 days are expected to be cold, with night temperatures falling to minus 16 and day-time values to minus 8 degrees; it will become milder--minus 2-minus 7 degrees--later, and there will even be thaws.

In the Baltic area, Belorussia and the central Chernozem and central oblasts November will start with unusually cold weather for the time of year. Night frosts in the central and central Chernozem areas will reach minus 15 degrees, and minus 5-minus 10 degrees in Belorussia and the Baltic area. Frosts are expected to abate later, when daytime temperatures will rise to 3-8 degrees above zero. It will become colder again in the second 10-day period, but there will be thaws from time to time. The coldest weather is expected in the third 10-day period. Overall, the weather in these areas will be unsettled, with cold snaps alternating with ailder periods, and precipitation with freezing weather.

In southern areas November will also start cold, but later in the South Ukraine, the North Caucasus and the lower Volga daytime temperatures will

rise to 8-13 degrees above zero. In the second and third 10-day periods unsettled weather is expected, with frequent precipitation and temperatures fluctuating between frosts at night and 5-10 degrees above zero during the day.

On the south coast of the Crimea and along the Black Sea coast of the Caucasus the month will start chilly, but later air temperatures will rise to 12-17 degrees above zero.

In the central and southern Urals in the first 10-day period there will be 12-17 degrees of frost at night and 7-11 degrees [presumably of frost] during the day; the frosts are expected to abate later, and night temperatures will mostly be minus 5-minus 10 degrees, and daytime temperatures minus 3-minus 8 degrees.

In the southern part of West Siberia and in North Kazakhstan November is expected to be considerably colder than usual; in the latter half of the month frosts will reach minus 25-minus 30 degrees during the night and minus 15-minus 20 degrees during the day.

In East Siberia and in the far east winter is really coming into its cwm. In mainland rayons of Magadanskaya Oblast and in the northeast Yakutskaya ASSR frosts will reach minus 42-minus 47 degrees at night and minus 36-minus 41 degrees during the day. At times in northern rayons of Irkutskaya and Chitinskaya oblasts and the Buryatskaya ASSR they will reach minus 35-minus 40 degrees at night and minus 22-minus 27 degrees during the day. The frosts will be less severe in South Krasnoyarskiy Kray, the Tuvinskaya ASSR, Amurskaya Oblast and the southern part of Khabarovskiy Kray. The weather is expected to be relatively mild in Primorskiy Kray and on Sakhalin. There night frosts will be within the limits of minus 7-minus 12 degrees, and there is the possibility of occasional thaws during the day. During cold snaps the temperature may drop to minus 20 degrees.

In Central Asia in the first 10-day period air temperatures will continue to rise to 20-25 degrees during the day. The second and third 10-day periods are expected to be cool, with sharp temperature fluctuations down to 2-7 degrees above zero. But in North Uzbekistan and North Turkmenia night frosts will at times reach minus 7-minus 12 degrees, and in the valleys of Kirgizia minus 17-minus 22 degrees. During milder periods daytime temperatures will rise to 7-12 degrees above zero.

CSO: 1824

FASTER PACE OF REPLOWING OF POTATO FIELDS URGED

Minsk SEL'SKAYA GAZETA in Russian 17 Oct 79 p 4

/Editorial: "Replowing of Potato Fields Must Be Completed More Rapidly"

/Text/ As is well known, the republic's farmers have undertaken to obtain 180 to 190 quintals of potatoes per hectare of the entire sown area. However, according to the latest data, they obtain 179 hectares. Is it possible to keep the promise made to the homeland and thereby to greatly replenish the fodder reserve? Yes, it is.

It is necessary at any cost and as quickly as possible, as long as the weather is warm, to replow every single hectare of potato fields. This is what this will yield provided that, in addition, up to 30 quintals of potatoes per hectare are obtained.

As of 15 October Brestskaya Oblast was left with almost 15,000 hectares that had to be replowed. They will yield up to 45,000 tons of potatoes. Vitebskaya Oblast was left with 10,800 hectares. They will yield 33,000 tons. Gomel'skaya Oblast was left with 19,600 hectares, from which it is possible to obtain 59,000 tons. Grodnenskaya Oblast must replow 23,500 hectares. They will yield more than 70,000 tons of potatoes. Mogilevskaya Oblast was left with 29,000 hectares, which can yield 88,000 tons of potatoes. Minskaya Oblast has the largest number of potato fields that are not replowed-35,000 hectares. A total of 88,000 tons of potatoes still remain in the earth there.

Thus, a simple calculation shows that the republic still has approximately 400,000 tons of potatoes in the earth! With the present poor fodder balance one can say that these are golden tons. Not to use them means to weaken the fodder base, which, as it is, is not very strong, and thereby to undermine the basis for the fulfillment of the plans and obligations for the production of livestock products this year, next year and during the five-year plan as a whole.

It is necessary not only to pick the potatoes remaining in the earth on unplowed areas, but to pick them again from plots that have already been replowed, to carefully store them temporarily, to put them into silage and to use them for fodder for livestock. For this purpose it is necessary to examine potato fields everywhere and to check where and how replowing was done.

It is a matter of honor of all farm managers, primary party organizations, people's controllers and all rural workers to organize literally these days work so that not a single potato remains in the earth. The labor and funds spent on the cultivation of "second bread" should be recovered fully. If cases of harvest losses are established, they must be immediately given a fundamental evaluation, because, as noted in the decree of the Bureau of the Central Committee of the Communist Party of Belorussia published yesterday, in the area of agriculture now there is no more important a task than the mobilization of forces and funds for the maximum possible increase in fodder reserves.

11,-39 cso: 1824 CARTOON ON SLOW REPLOWING OF POTATO FIELDS

Minsk SEL'SKAYA GAZETA in Russian 18 Oct 79 p 4

Cartoon by A. Garmazy/

 $\sqrt{\text{Text}}$ Potato fields are being slowly reployed on a number of farms in the republic.



Why hurry with replowing? Our cows are trained, they will pick potatoes by themselves...

11,439 CSO: 1824 EXPERIENCE AND PROBLEMS IN INTERFARM COOPERATION

Minsk SEL'SKAYA GAZETA in Russian 5 Sep 79 p 2

[Article by N. Geryachko, sector chief of the Belorussian Scientific Research Institute of Economics of Agriculture, candidate of economic sciences: "What Should the Association Be?"]

[Text] A whole number of rayons of the republic are successfully implementing deep specialization of kolkhozes and other state farms. Interfarm complexes are being constructed and are in operating. As a result, the growth rates of the output of products are increasing and expenditures of labor and feeds are decreasing, which lead to increased profitability of all branches. The successes of the narrowly specialized farms are widely known: of the Kolkhoz imeni Krasnaya Armiya in Viteoskiy Rayon, the Kolkhoz imeni Uritskiy in Gomel'skiy Rayon, and a number of others. There is no need to discuss their successes in detail. In this stage, other questions arouse concern.

Why are the farms' production ties so weak in certain rayons and why are the processes of deepening specialization and concentration of the main commercial branches proceeding so slowly?

Of course one cannot agree with the assertion that this is taking place only because the republic has changed over from small, territorial associations comprised of 5-6 farms to the associations of all farms of the rayon -- 25-30 kolkhozes and sovkhozes. The consolidation of small territorial associations into an association of all farms of the rayon is a natural process. In the all-union division of labor the republic's agricultural production has a clear predominance of animal husbandry. Consequently, before deciding the sizes of agricultural associations, it is necessary to have animal husbandry farms and complexes that are optimal for our conditions.

The main task and the main goal pursued by the creation of associations is the changeover of agricultural branches to an industrial basis, which can be achieved by the construction of large animal husbandry complexes. The sizes of hog raising complexes, for example, have been set so as to accomodate annually 37,000-54,000 head of hogs on fattening. This is justified primarily by the fact that the need for capital investments to obtain a quintal of

The same of the control of the contr

THE LANCE OF COMMUNICATION OF THE PROPERTY OF

And it the lower Older and COO by the security of the feet of each that It can be at the control of the security of the securi

It is only unterstandant that the amount of und will depend on its prolect(O): Notemar, to the property of a real rapidly depend on its interpretation of the hard of park had an full view for take reported of the required in grantine this more than a few full representations must be below of the report.

Of community of the control of problems out also be suffered on the basis of control of a control of a control of a control of the control of

The second of th

The Control of the Co

The branch process of any or the late of the continue to the feed opposed of a source of the feed of t

The work emperies of large bug in the constitution of this. There the constitues of the constitue of the constituent of the

The state of the state of the paper of the state of the s

Les are interested to the form included in the association.

In the action of the interest of the form included in the association. The form will the self-life object to the farm that the association of the model life object to the farm interests and the advantage of the single for minuters in specialists to remembrate the farm of the self-life of the farm of the self-life of the farm of the self-life object of the farm of the self-life object of the farm of the self-life object of the farm of the associations are the self-life object of the farm of the associations are the self-life object of the farm of the self-life object of the farm of the basis of calculated the model of the farm of the basis of calculated the model of the farm of the basis of calculated the model of the farm of the basis of calculated the model of the farm of the basis of calculated the model of the farm of the basis of calculated the model of the farm of the basis of calculated the model of the farm of the basis of calculated the model of the farm of the basis of calculated the model of the farm of the basis of calculated the model of the farm of the basis of calculated the model of the farm of the basis of calculated the model of the farm of the basis of calculated the model of the farm of the basis of calculated the model of the farm of the basis of calculated the model of the farm of the basis of the farm of the farm

The little of the state of the

The second secon

.

DACHIM KUNZ ARTICLE ON MEADOW AND PASTURE DEVELOPMENT

Tselinograd FREUNDSCHAFT in German 24 Jul 79 p 2

Article by Joachim Kunz: "To Improve Pasture Yields"

The lith plenum of the Central Committee of the Communist Party of sinkhstan states that: "In view of the fact that pasture feed accounts for a large proportion of the feed balance of southouses and kolkhozes, we stiprovide comprehensive efforts in order to increase the yields of material green-feed producing land through fundamental improvement of the high rights and pastures, to irrigate them and create irrigated artificial materies, to intensify the utilization of the Irrysh and other river valleys, to use underground water for feed crop cultivation."

pastures yield 70 percent of the sheep feed of the republic, and although it is the theapest of feeds, their yields are still too low. The average has yield varies between 1.5-3.5 centners per hectare. This is why a further development of sheep-raising is closely dependent on increasing pultivation in pasture farming in our republic, because it is the sheep which are best able to utilize most effectively the immense pastures in our steppes, deserts and semideserts. They can consume 85 percent of all plant species of these zones (compared with 70 percent for other animals).

Refore the end of the Tenth Five-Year Plan, the population of animals of all kinds will have increased considerably, as will have the production of the period and eggs. In order to achieve the anticipated level in livestock raising, large-scale organisatory and economic measures are necessary to improve the material-technical basis of communal livestock raising, and to consolidate the feed basis: creation of artificial pastures on irrigated areas and dry land, creation of oases using underground water, irrigation of the pastures, and rational utilization of natural leed-producing fields.

Under the conditions prevailing in Kazakhstan, artificial pastures solve the problem of supplying the animals with good cheap green feed during the summer months. tresh grass of talks 19-1 crass of raw protein. When cows are tracked a triggered artificial pastures, their milk production is unsiderable three seed. At the experimental tarm of Bishkut, in the severestakent was a list, first-call cows kept in the stables gave 18 percent of the thirty was grazing on 19 Thated artificial pastures.

The fillest Dastire yields are obtained on artificial pastures intensively used the production of reen reed and as pastures. The experience of the leading wilk result the republic, Put' Lenina in Dzhambulskava Oblast.

10 Year Farakistan DF 1: Five darskava Oblast, Put' Ilvicha in Chimkentskava Ob

Fractive has shown that application of a rational technology of creation and cilization of irrigated artificial pastures results in considerably nigher field of feed crops and ansiderably lower production costs. At the frace which, is the translava Oblast, artificial pastures yield of entire of creen feed per hectare, the production costs of a centner of feed units being at a cost of a frace per centner of feed units.

The non-lucion is divisus. Pasture-farming, as a branch of feed production, this envir tell a scientific bases, all the more so as the work for this diversion it pasture farming to a modern basis is already available. The scannition be early institute for Meadow and Pasture Farming recommends a termine stationary utilization of natural pastures according to a system of alternating explaination of pastures.

The inture of this method is made clear by the example of the Aidarly massif in the desert foothills north of Lake Balkhash. There, a herd of 1.070 fire-wood sheep graze on 2.700 hectares of pastureland. This guarantees primal arraing which, in turn, guarantees year-round top viels of the pastures.

The area la divided according to the principle of a 3-year, three-field state--"pring, summer, fall." Each section has further been divided into turee parts. At first, the sheep are put to graze on one section for as long as the vegetation remaining from the previous year will allow, then they eat the rapidly growing prasses.

The conversion of sheep-raising to an industrial basis makes it necessary to erect fences of large-mesh wire or other materials and to build modern watering and civil engineering systems both for the sheep and for the sheepherd's housing.

Arranding to calculations, these expenses will pay off in three to four years. The most important, however, is to ensure a long production life of the pastures, Kazakhstan's greatest riches.

if it is the bound of the limit of the state of the state

real relations desert and semidesert pastures and the improvement of the provided develop-

10-11-34/6

THAMBAKIN INTERVIEW ON MEADOW AND PASTURE DEVELOPMENT

Trelinegrad ERSTVDSCHAFT in German 4 Jul 74 p. 2

Report on LATAS interview with Ch. Ziambakin, head of the Kazakhstan Results Institute for Meadow and Pasture Farming: "For Good Cheap Feed"]

Text; On natural meadows and pastures of the republic, the hav harvest is in full swing. On many farms, vields of 10 or more centners of hav per hectare have been achieved. This is the result of a fundamental improvement and irrigation of har fields and pastures.

The extensive natural pastures of the republic yield up to 70 percent of the feed, and it is cheap feed. Zh. Zhambakin, head of the Kazakhstan Research Institute for Meadow and Pasture Farming, told the KASTAG correspondent. The yields, however, are still too small. The average yield of the pastures varies between 1.5 and 3.5 centners dry hav per hectare. This is why we must intensify the creation of irrigated and artificial pastures, and accelerate the creation of oases around underground-water springs as well as the rational utilization of meadowland. Of late, work simed at a fundamental improvement at the hay fields and pastures of our republic has taken large proportions, especially in the Tselinogradskaya, Kokchetayskaya and other Oblasts.

Thanks to sultivated pastures, the extremely important problem of supplying livestock farms with good cheap feed during the summer months has been solved. Grasses on cultivated pastures have a high food value. Each kilogram contains 25-30 percent of grams of raw protein. Cows grazing on such fields yield I more kilogram of milk per cow per day.

At the experimental farm of Bishkul, in the Severo-Kazakhstanskaya Oblast, cows kept in the stable yield 18 percent less milk than cows grazing on irrigated massifs.

Irrigated artificial pastures give the best results when they are intensively used for the production of green feed and as pastureland, as has been shown at the Put' Lenina Kolkhoz in Dzhambulskaya Oblast, the 30 Years Kazakhstan SSR Kolkhoz in Pavlodarskaya Oblast, Put' Ilyicha Kolkhoz in Chimkentskaya Oblast, and on other farms.

The artificity of a rational tending of real moderation of artificity of the surfaces results in higher feed or public and malderation mentions of the particles. Scientific wife in this particle is arready available. Our institute recommends stationary difficultion of the pastures. The real time of the system of alternating explication of pastures. The real time of the introduced improvement of intringuished values and areas of a tile for feed production in irrigated bases. Through overdamming irrigation—using once and the spring waters from steppe rivers and irrigated—if is possible to increase the yields of many natural have fields—I through the production by 15 percent. If one sows perennial grasses of all migrated fertilizers, yields of 43-50 centners per pertare can be artificed before and sent-desert land of the republic.

424-

PROTECTIVE MINTER CHOPS FROM DRUCKS REFLEY

KING TILL STATE AND INVESTMENT A DOC OF p. 31

particle in F. Administration, read of the Flant Projection Administration, Ministration in the Expansion RRR and L. Plastum, sendor research enter of the Expansion Scientific Research Institute of Plant Protection, randiture of figure at a large and a sciences: "Frotecting Winter Crops from Harmful water"

[list] Secontly the most damage to winter grain trops is being done by the ground or carabide Seconts. It creates a lat of mischief in the steppe rode of the republic where weather conditions favor mass breeding of this pest.

Claim of the sector are damaged in Jarvae of the ground heetle which hide in the solid the ground during the day, and one out in the morning and at that the lead of course should and leaf blades, hewing them up and drag clar the lower leaves into their follow. Extremely damaged plants die off. It are thinned, which, in turn, lowers productivity and in foci of mass product this pest sowings are lest. The presence of one or two larvae per square motor already poses a threat.

In the meantime, on many farms of the Unipropetrovskaya, Donetskaya, Importuniskaya, Nikolayevskaya, Poltavskaya, Khersonskaya, individual rayons of Kirovogradskaya, Krymskaya, Sumskaya and Kharkivskaya oblasts on crops fullowing stubble predecessors four-eight and even more larvae are counted per square meter.

on a number of farms in addition to the ground beetle on wheat shoots, there appeared also caterpillars of winter and other gnawing moths, cereal flies, pleadas and plant liee.

To save the grops from these pests, it is essential to inspect the winter crops systematically, marking off areas for chemical treatment as soon as possible. Particular attention should be paid to wheat sown after stubble crops.

The second distance of the second second second second second distance of the second distance of the second second

In the street beet a corner and caterpillars of grawing sorter, and once of a contained between the contained of a contained between the contained by the contained between the contained by t

with a singlet crop stocks shall be reserved with alberal fertilizers.

The time of the office ded development, ground beetle largue on damage the ulter the opting settled also. Therefore, brief to winter arrival, the office of posts should be determined and, based on this infinitely, respective measures should be planned for spring 1950.

(4)0

INCHES THE ADMINISTRATION OF THE PARTY DESCRIBED.

the duty (RMC) in Americal and 2 Sep 74 (

LOUVELE BY Cardidate of Biological Sciences Sinira Nestreva, Institute of Loulogy, Azerbaijan SSS Academy of Sciences: "Insect Frote-Lors"

That During implement it agricultural measures, the struggle against usels, and the use of chemicals in the fields in the proper amounts and according to broken procedures are of great importance in agricultural production. In this area, increased employment of beneficial inserts, i.e. the biological struggle against posts, is at especially great importance.

Liberatories at the Institute of Employe, Arerbatian SSE Academy of Sciences, are Lattying in important were involving ecological study of beneficial and narrival insects in the republic and development of methods for high-giral struggle against pests.

The limitativies are engaged in investigating the life cycles of predaceous insects, since these types of insects destroy agricultural and forest pests. This group of insects includes the numerous beneficial ground beetles [Carabidae], Ladyrugs and a number of others.

The ground beetle is an insect I mm long which crawls along the ground and lives under stones and leaves. It is black or sometimes gray in color. It moves along the ground looking for the pupac of farmful moths, and destroys many harmful insects which live in gardens, melon growing areas and forests by eating their larvae and egg.

Some 106 rarieties of ground recties are known to science on the Apsheron Peninsula. They remove pests from agricultural crops and parks. The ground beetles produce many generations every year.

In propagate themselves, ground beetles gather together in great numbers, both males and females, rise into the air on a still night and fly to a relatively damp wooded area to breed.

The control of the co

The state of the ground worlds, the Larring is disc extramely benefit his. The state of militaring may were created in stage and test of militaring in the composition of the larring live on plants. These insects and their larring live on plants.

In twentil of the tentile of the land of the best of the set and the set and the set of the set of the set of the property to the sensy smedi of the set of the sensy smedi of the sensy set of the se

— as instructable numbers of aphias, scale inserts and other insert pests.
— abilities the universe the numbers of the pests and seep them at a certain but the public but the public series of the pests and seep them at a certain.

A PARTIE OF LACYPIES IN the Apster of Pentrella. The mains contain the first description of the difference of the billions.

The tainties have the task of raising Local varieties of ladybugs in the task of raising Local varieties of ladybugs in the top of the properties at the case protect these areas from unfavorable con-

The little and a price and the straight of the price of the price of the period of the fields, gardens and parks, benefit all insects are interprited as a with partial ones. Moreover, some of the personnus chemicals are interprited as a with partial ones, Moreover, some of the personnus chemicals are interpreted actions attern and iless into water systems, and thus can poison the results and iless animals.

The important tasks facing us consists at combining the biological plant pasts of agricultural traps with the chemical struggle and maintain the chemical struggle as the hislogical struggle becomes a structure, they in this way can we protect and preserve the balance of the crops.

-0.60 1.00 - 1610

I ANN CHARMER ARTICLE ON PROTALIZATION IN OWING PAINING

Trailnowred FRELMINGCHAFT in German & Jul 79 t 7

Article by Johann Kraemer: "Specialization in Swine Raising"

The production of park in the republic buring the [first] 6 months of this year has increased by 1,200 tons in commarison to the same period of the traceting year. In the Taldy-Kurranskaya Chlast and Turgavskaya Chlast, pork sales have increased by almost 1.5 times [the figure for the preceding year]; in the Tselinogradskaya, Kokchetavskaya, Pavlodarskaya, Dzhambul'skaya, Semipelatinskaya, and Kustanayskaya Oblasts, this livestock production branch experienced further development.

The Tevero-Mazakhstanskaya Oblast is a zone of the best-leveloped making raising. This area produces more than 400,000 piglets--almost 20 percent of the total number in the republic. Weight gains, however, are still low, which is also true of other oblasts.

The concentration of the branch in specialized farms encourages the profitability of swine raising. The Tokushinsky and Sovetsky Sovkhozes, Severo-Kazakhstanskaya Dilast, can serve as an example in this connection; they produce approximately 2 percent of the meat which is obtained from almost 100 farms of the oblest which raise swine. Specialization leads to a substantial reduction of labor expenditures and—by almost one-third—of fodder consumption. These two farms register annual profits of more than 2 million rubles.

In the Sovetsky Sovkhoz the complex is calculated for 11,000 animals. Here more than 50 decitons of pork are produced daily. The automatic swine fittening stall has been modernized, a new farrowing pen with automatic feeding equipment has been put into operation, which has doubled labor productivity. With a daily output of 70 tons of mixed feed, the mechanism fully meets the demand.

Many other farms in the republic, too, have become convinced that specialization is profitable. In the Kaskelensky Kolkhoz, Alma-Atinskaya Oblast, a complex for 12,000 animals has been built. Here the raising of swine has been put on

farm sells mure than 1,000 times of meat a year to the state. All work processes are jumireheasive, organized on the basis of an assembly line process, whose numbers is specialization.

(rantire shows that labor productivity in the farms with more than 10,000 mylne is almost twice as nigr and the production costs of weight increases were almost half as low as in the farms with less concentration in the stock of animals.

In example of high concentration and specialization of livestock branch is The dignary complex near Karaganda, which is based on principally new two includes. In 1978 more than 108,000 piglets were obtained here, more than the swine were sold in the state, and the sale of products yielded a profit a nillium rubles.

The reputite, easit interfare production associations for owine raising have been filted in bit obligate. These include 42 sovkhozes, which will increase that production by the end of the five-year plan to 90,000 to 101,000 tons, i.e., to be recent of the total pork production in the republic.

DOI 1676

LIVE TOUR RATIOING IN COMPLEMEN

Tselinograd FREUNDSCHAFT in German 18 Ser 79 p 2

[Article by M. Ligarev and G. Trifonova: "Co lective Forms of Work in Live-

Next. Under the conditions of scientific-technical progress, specialisation and concentration in livestock raising, and the transition to industrial economic methods, the introduction of a rational work organization and an economy of labor time is the urgent task.

The construction of large livestock complexes and the reconstruction of old livestock farms, which were built according to standard building designs and constandardized designs, leads not only to a change in the character of the work of the livestock breeders, but also to the further breaking down and deepening of specialization.

Livestock production on an Industrial basis also requires a new approach to the solution of organizational, technological, technical, construction engineering and economic questions. Industrial methods presuppose a night level of capital equipment, complex mechanization and automation of the work process and a scientific organization of labor, which guarantee the strong increase in the productivity of the total work and the reduction in the production costs of livestock production.

All of this requires the general elaboration of appropriate forms of work organization, which must be based on such progressive principles of work organization as the division of labor, specialization of employees, and the creation of favorable conditions for the realization of all work processes.

The collective keeping of livestock under narrow specialization of employees permits the increase of their qualifications, good use of machines, the restriction of labor time expenditure for additional work to a minimum, the application of industrial methods of work, and the execution of all work in line with veterinary-medical requirements.

The collective form of work organization permits the clear division of duties among the coworkers and guarantees the comprehensive and even utilization.

It makes possible the execution of all work processes in the most economical way and ultimately the reduction of the number of service personnel.

with the transition of livestock raising to an industrial basis and the growth of the technical equipment of the farms and complexes, the division of labor among the employees of livestock raising is intensified, as a result of which the number of full-time employees becreases and the number of service personnel setur men, fitters, etc. increases. It proves expedient to form self-reliant specialized work groups to service the main production. With this work translation, buildings, machines and diverse technological equipment are substituted the group, resulting in the creation of collective responsibility and new interrelationships among the employees. The collective form increases the degree of specialization of all employees (ratio of time for the execution of the basic work processes to profitably expended time).

with the nustionary work organization, the livestock breeders, in addition to their main duties, carry out many ancillary operations, for which more than 10 percent of the time must be expended. This leads to the prolongation of the working day, the lowering of the quality of the tasks to be performed, and to a negative influence on perfection of skills and the retional use of work through the highly-qualified contingent of employees.

The sollective form of work organization distinguishes the work of the milkers, stockmen, and other employees in the livestock business more clearly and frees them, above all, from ancillary operations.

The result there is an increase in the load norm per employee, and that also means as increase in labor productivity. In the Wrumkaysky Sovkhoz, for example, for covs are kept in a farm with loose housing by a specialized brigade of 17 employees. This brigade includes two groups of machine milkers, me group of stockmen for the milking parlor, and two service groups.

In the fakehetavskiy Sovkhoz 18 employees are occupied with the fattening of 18,000 swine. They are divided into five groups: three groups of swine seepers and two groups of unskilled workers. A one-shift work and rest rhythm has been set for them. As a result of the new work organization, all employees in livestock breeding in these enterprises can be paid on the basis of output produced (milk and increase in live weight).

The collective kering of livestock and the narrow specialization of employees made it possible to increase the load norm for a machine milker in the Urummaysky Dovahoz to 100 cows, for a swine keeper to 300 animals a day, for a milker at the milking facility to 150 animals, and for an engine operator, a fitter to service the milking plant, and a fitter to service the complex in 500 animals each. The mean load for an employee amounts to 35.3 cows.

In the Yakehetavsky Sovehoz the load norm for a swime keeper is 1,000 swime, for an operator to service the installations and equipment, and for

an engine operator to unload the liquid manure 5,000 animals each, for a skilled worker and for a worker in the feed department, for a driver and a worker in water supply 10,000 animals each. The mean load norm is 556 animals per employee.

The collective form in the work organization of the employees in livestock raising makes possible the introduction of complex mechanization of the production processes, increases labor productivity and the yield of cattle, improves the quality of production and decreases production costs.

This form is most widespread in beef production (in the breeding and in cattle fattening) in mechanized stations, which economically are very efficient.

An analysis carried out at 123 cattle fattening stations of the oblast shows that the average increase here is 294 grams higher than in the conventional organization of fattening, labor productivity is 2.3 times as high, production costs per hundredweight of increase fall by 87 rubles, and feed consumption per hundredweight of increase is 5.5 hundredweight feed units less. The collective form of the work organization of the employees in livestock raising who are employed in the breeding and fattening of cattle, finds wide application in the specialized economic associations at the rayon level, in which all work processes are mechanized.

Of all the cattle fattening stations at which experiences in the work organization of the employees in livestock keeping were gathered, the half-open mechanized cattle fattening station of the Kuybyshevskoye specialized rayon economic association is the most interesting. A group of 4 mechanizers in livestock breeding takes care of 1,1000 cattle.

The pay of all group members depends on the attained increase of the animals. During the summer they receive 3.75 ruble per hundredweight of increase, and during the winter 4.66

The effectiveness of work organization in the breeding and fattening of cattle on a mechanized lot increases from year to year.

The collective form allowed new norms for the conduct of the employees among one another to come into being, the principle "all for one and one for all" has come into force.

Since they have a common goal, the total production plan for weight increases on whose fulfillment to pay of every stockman depends, the coworkers of the work group are interested in honest and conscientious work.

Now the members of the group are no longer indifferent about how the cattle are judged which they deliver to the state and what their productions costs are.

It can already be surmised that the transition to industrial fattening via cattle stations will make it possible for the economy of the oblast in the

near future to free 800 workers for work in other production areas, to increase labor productivity to 3 times the previous level, and to economize 700,000 rubles. The application of these experiences for the collective form of work organization in dairy cattle, swine and sheep raising is already on the agenda.

8970 CSO: 1826

BRIEFS

KHABAROVSK KRAY POTATOES—As of yesterday the potato harvest was completed in Khabarovsk Kray with potatoes being gathered from 9,797 hectares and 52,375 tons of this crop, or 90 percent, have already been sold to the state. Soybean harvesting has begun and this crop will be harvested from 60,000 hectares in the kray. [Khabarovsk Domestic Service in Russian 0930 GMT 6 Oct 79]

CSO: 1824

END

END OF FICHE DATE FILMED 27 NOV 79